INFORMATION DISCLOSURE STATEMENT

Applicant

Thomas F. Fangrow, Jr.

App. No.

Unknown

Filed

Herewith

For

MEDICAL VALVE WITH POSITIVE

FLOW CHARACTERISTICS

Examiner

: Unknown

Group Art Unit

Unknown

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing one hundred sixty-seven (167) references that were previously disclosed to or cited by the Patent and Trademark Office in the prosecution of U.S. patent application No. 09/614,001, filed July 11, 2000, which is the parent of this continuation application, and is relied upon for an earlier filing date under 35 U.S.C. § 120. Copies of the references are not submitted pursuant to 37 C.F.R. § 1.98(d).

This Information Disclosure Statement is being filed with an RCE or within three months of the filing date of this application and no fee is required in accordance with 37 C.F.R. § 1.97(b)(1), (b)(2), or (b)(4).

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 8/7/03

Paul N. Conover

Registration No. 44,087

Attorney of Record

Customer No. 20,995

(949) 760-0404

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY, DOCKET NO. ICUMM.127C1

APPLICATION NO. Unknown

INFORMATION DISCLOSURE STATEMENT

BY APPLICANT

APPLICANT

Herewith

(USE SEVERAL SHEETS IF NECESSARY)

Thomas F. Fangrow, Jr. FILING DATE

GROUP Unknown

U.S. PATENT DOCUMENTS						
	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
1.	Des. 321,250	10/29/91	Jepson et al.			
2.	Des. 321,251	10/29/91	Jepson et al.			
3.	1,578,517	3/30/26	G.N. Hein			
4.	2,210,098	08/06/40	E.A. Ravenscroft			
5.	2,289,677	7/14/42	H.N. Perelson			
6.	2,847,995	8/19/58	J.Q. Adams			
7.	2,999,499	09/12/61	R.H. Willet			
8.	3,134,380	5/26/64	Thomas A. Armao			
9.	3,135,261	6/2/64	Alfred J. Carroll			
10.	3,354,881	11/28/67	Herman S. Bloch			
11.	3,502,097	03/24/70	W. F. Muller			
12.	3,630,199	12/28/71	Gangarosa			
13.	3,648,684	3/14/72	Barnwell et al.			
14.	3,659,602	05/02/72	Cloyd			
15.	3,788,519	01/29/74	Mengel			
16.	3,831,629	08/27/74	Mackal et al.			
17.	3,852,385	12/3/74	Huggins			
18.	3,861,388	01/21/75	Vaughn			
19.	3,974,832	8/17/76	Kruck	}		
20.	3,976,063	8/24/76	Henneman et al.	1		
21.	3,976,073	8/24/76	Quick et al.			
22.	3,986,508	10/19/76	Barrington			
23.	3,993,063	11/23/76	Larrabee			
24.	3,994,293	11/30/76	Ferro			
25.	4,005,710	02/01/77	Zeddies, et al.			
26.	4,019,512	4/26/77	Tenczar			
	2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 20. 21. 22. 23. 24. 25.	1. Des. 321,250 2. Des. 321,251 3. 1,578,517 4. 2,210,098 5. 2,289,677 6. 2,847,995 7. 2,999,499 8. 3,134,380 9. 3,135,261 10. 3,354,881 11. 3,502,097 12. 3,630,199 13. 3,648,684 14. 3,659,602 15. 3,788,519 16. 3,831,629 17. 3,852,385 18. 3,861,388 19. 3,974,832 20. 3,976,063 21. 3,976,073 22. 3,986,508 23. 3,993,063 24. 3,994,293 25. 4,005,710	1. Des. 321,250 10/29/91 2. Des. 321,251 10/29/91 3. 1,578,517 3/30/26 4. 2,210,098 08/06/40 5. 2,289,677 7/14/42 6. 2,847,995 8/19/58 7. 2,999,499 09/12/61 8. 3,134,380 5/26/64 9. 3,135,261 6/2/64 10. 3,354,881 11/28/67 11. 3,502,097 03/24/70 12. 3,630,199 12/28/71 13. 3,648,684 3/14/72 14. 3,659,602 05/02/72 15. 3,788,519 01/29/74 16. 3,831,629 08/27/74 17. 3,852,385 12/3/74 18. 3,861,388 01/21/75 19. 3,974,832 8/17/76 20. 3,976,063 8/24/76 21. 3,986,508 10/19/76 23. 3,993,063 11/23/76 24. 3,994,293 11/30/76 25. 4,005,71	DOCUMENT NUMBER DATE NAME	DOCUMENT NUMBER DATE NAME CLASS	DOCUMENT NUMBER DATE NAME CLASS SUBCLASS

EXAMINER	

U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE

ATTY. DOCKET	NO
ICUMM.127C1	

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APPLICANT Thomas F. Fangrow, Jr.

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(USE SEVERAL SHEETS IF NECESSARY)

	U.S. PATENT DOCUMENTS						
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	27.	4,022,205	05/10/77	Tenczar			
	28.	4,040,240	08/09/77	Speer			
	29.	4,076,285	2/28/78	Martinez			
· · · · · ·	30.	4,079,738	3/21/78	Dunn et al.			
	31.	4,080,965	3/28/78	Phillips			
	32.	4,121,585	10/24/78	Becker, Jr.			
	33.	4,128,098	12/5/78	Bloom et al.			
	34.	4,143,853	03/79	Abramson			
	35.	4,149,535	04/17/79	Volder			
	36.	4,161,949	7/24/79	Thanawalla			
	37.	4,187,846	2/12/80	Lolachi et al.			
	38.	4,191,183	03/04/80	Mendelson			
	39.	4,214,779	7/29/80	Loseli			
	40.	4,219,912	9/2/80	Adams			
	41.	4,243,034	01/06/81	Brandt			
	42.	4,257,416	03/24/81	Prager			
	43.	4,294,249	10/13/81	Sheehan et al.			
	44.	4,296,949	10/27/81	Muetterties et al.			,
	45.	4,306,705	12/22/81	Svensson			
	46.	4,328,802	5/11/82	Curley et al.		,	
	47.	4,329,987	5/18/82	Rogers et al.			
	48.	4,334,551	6/15/82	Pfister			
	49.	4,338,933	7/13/82	Bayard et al.			
	50.	4,362,156	12/7/82	Feller, Jr. et al.			
· · · · · · · · · · · · · · · · · · ·	51.	4,392,851	07/12/83	Elias			
	52.	4,405,163	09/20/83	Voges, et al.			
	53.	4,405,312	09/20/83	Gross, et al.			

DATE CONSIDERED

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE ATTY, DOCKET NO. ICUMM.127C1

APPLICATION NO. Unknown

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APPLICANT Thomas F. Fangrow, Jr.

FILING DATE Herewith

GROUP Unknown

	U.S. PATENT DOCUMENTS						
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	54.	4,411,662	10/25/83	Pearson			
	55.	4,417,890	11/29/83	Dennehey et al.			
	56.	4,432,759	2/21/84	Gross et al.			
	57.	4,432,765	2/21/84	Oscarsson			
	58.	4,439,188	3/27/84	Dennehey et al.			
	59.	4,439,193	3/27/84	Larkin			
	60.	4,457,749	7/3/84	Bellotti et al.			
	61.	4,508,367	4/2/85	Oreopoulos et al.			
	62.	4.511.359	4/16/85	Vaillancourt			
	63.	4,512,766	4/23/85	Vailancourt			
	64.	4,564,054	1/14/86	Gustavsson			
	65.	4,592,356	6/3/86	Gutierrez			
	66.	4,607,868	08/26/86	Harvey, et al.			
	67.	4,610,469	9/9/86	Wolff-Mooij			
	68.	4,617,012	10/14/86	Vaillancourt ,			
	69.	4,623,068	11/18/86	Brown et al.			
	70.	4,645,494	2/24/87	Lee et al.			
	71.	4,673,400	6/16/87	Martin			
	72.	4,706,487	11/17/87	Bandou et al.			
	73.	4,725,267	2/16/88	Vailancourt			
	74.	4,752,292	6/21/88	Lopez et al.			
	75.	4,759,756	07/26/88	Forman, et al.			
	76.	4,775,369	10/4/88	Schwartz			
	77.	4,781,702	11/1/88	Herrli			
	78.	4,804,015	02/14/89	Albinsson			
	79.	4,810,241	3/7/89	Rogers			
	80.	4,813,938	03/21/89	Raulerson			

EXAMINER	DATE CONSIDERED

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET	NO
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APPLICATION NO. Unknown

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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APPLICANT Thomas F. Fangrow, Jr.

FILING DATE Herewith GROUP Unknown

	U.S. PATENT DOCUMENTS						
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	81.	4,832,214	5/23/89	Schrader et al.			
	82.	4,834,664	5/30/89	Lin			
	83.	4,834,716	05/30/89	Ogle, II			
	84.	4,874,377	10/17/89	Newgard et al.			
	85.	4,878,897	11/7/89	Katzin			
	86.	4,928,212	5/22/90	Benavides			
	87.	4,943,896	7/24/90	Johnson		,	
	88.	4,946,445	08/07/90	Lynn			
	89.	4,964,855	10/23/90	Todd, et al.			
	90.	4,969,883	11/13/90	Gilbert et al.	!		
	91.	4,998,713	3/12/91	Vaillancourt			
	92.	4,998,927	03/12/91	Vaillancourt			
	93.	5,009,490	4/23/91	Kuono et al.			
	94.	5,018,532	5/28/91	Ethridge, III			
	95.	5,046,456	9/10/91	Heyman et al.			
	96.	5,064,416	11/12/91	Newgard			
	97.	5,065,783	11/19/91	Ogle, II			
	98.	5,100,394	03/31/92	Dudar et al.			
	99.	5,122,123	06/16/92	Vaillancourt			
	100.	5,135,489	08/04/92	Jepson et al.			
	101.	5,154,703	10/13/92	Bonaldo			
	102.	5,158,554	10/27/92	Jepson et al.			
	103.	5,171,234	12/15/92	Jepson et al.			
	104.	5,188,620	2/23/93	Jepson et al.			
	105.	5,199,947	04/06/93	Lopez, et al.			
	106.	5,201,717	04/13/93	Wyatt et al.			
	107.	5,203,775	04/20/93	Frank et al.			

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE ATTY. DOCKET NO. ICUMM.127C1

APPLICATION NO. Unknown

INFORMATION DISCLOSURE STATEMENT

(USE SEVERAL SHEETS IF NECESSARY)

BY APPLICANT

APPLICANT Thomas F. Fangrow, Jr.

FILING DATE

Herewith

GROUP Unknown

U.S. PATENT DOCUMENTS CLASS SUBCLASS **EXAMINER** DATE NAME **FILING DATE** DOCUMENT NUMBER INITIAL (IF APPROPRIATE) 108. 5,211,638 5/18/93 Dudar et al. 109. 09/07/93 DeFrank 5,242,432 10/26/93 110. 5,256,155 Yerlikaya et al. 12/14/93 111. 5,269,771 Thomas et al. 12/28/93 112. Bonaldo 5,273,533 3/1/94 113. 5,290,254 Vaillancourt 114. 5,344,414 9/6/94 Lopez et al. 3/28/95 115. 5,401,245 Haining 5/2/95 116. 5,411,499 Dudar et al. 117. 5,470,319 11/28/95 Mayer 118. 5,487,731 1/30/96 Denton 07/96 Atkinson et al. 119. 5,533,708 8/27/96 Elias et al. 120. 5,549,566 08/96 Lynn 121. 5,549,651 5,556,388 122. 9/17/96 Johlin, Jr. 10/14/97 123. 5,676,346 Leinsing 124. 5,685,866 11/11/97 Lopez 11/25/97 125. Lopez et al. 5,690,612 126. 5,694,686 12/9/97 Lopez 127. 5,695,466 12/9/97 Lopez et al. 128. 5,699,821 12/23/97 **Paradis** 5,700,248 12/97 129. Lopez 130. 4/14/98 5,738,663 Lopez 131. 5,797,897 08/98 Jepson et al. 12/23/97 132. 5,700,248 Lopez 02/23/99 133. 5,873,862 Lopez 134. 5,957,898 09/99 Jepson et al.

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DATE CONSIDERED

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ICUMM.127C1	APPLICATION NO. Unknown
	DISCLOSURE STATEMENT Y APPLICANT	APPLICANT Thomas F. Fangrow, Jr.	
(USE SEVERAL SHEETS IF NECESSARY)		FILING DATE Herewith	GROUP Unknown

U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
	135.	5,967,490	10/19/90	Pike .				
	136.	6,019,748	02/01/00	Lopez			. , , , , , , , , , , , , , , , , , , ,	
	137.	6,113,068	09/05/00	Ryan				
······································	138.	6,132,404	10/17/00	Lopez		,	7	
	139.	6,171,287	01/01	Lynn et al.				
	140.	6,245,048	06/12/01	Fangrow, Jr. et al.				
<u></u>	141.	6,325,782	12/04/01	Lopez				
	142.	6,428,520	08/06/02	Lopez et al.				

FOREIGN PATENT DOCUMENTS									
EXAMINER		DOCUMENT NUMBER DATE		COUNTRY	CLASS	SUBCLASS	TRANSLATION		
INITIAL							YES	NO	
	143.	1,105,959	7/28/81	Canada					
	144.	0 114 677	8/1/84	Europe					
	145.	0 237 321	3/10/87	Europe					
	146.	0 240 590	4/7/87	Europe			·		
	147.	0 309 771	3/9/88	Europe					
	148.	0 367 549	10/31/89	Europe					
	149.	0 399 119	7/27/89	Europe					
	150.	0 438 909	12/21/90	Europe					
-	151.	0 446 463	12/18/90	Europe					
	152.	84 25 197.2	10/31/85	Germany					
	153.	855 319	9/11/52	Germany					
	154.	DE 37 40 269 A1	06/01/89	Germany				٠	
	155.	GB 2 034 185 A	06/04/80	Sweden					
	156.	1,435,244	04/07/88	Japan					
	157.	2 439 022	05/16/80	France					

EXAMINER	DATE CONSIDERED

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FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ICUMM.127C1	APPLICATION NO. Unknown	
	DISCLOSURE STATEMENT Y APPLICANT			
	TAPLICANT	APPLICANT Thomas F. Fangrow, Jr.		
(USE SEVERAL	SHEETS IF NECESSARY)	FILING DATE Herewith	GROUP Unknown	

FOREIGN PATENT DOCUMENTS								
EXAMINER	MINER DOCUMENT NUMBER DATE		COUNTRY	CLASS	SUBCLASS	TRANSLATION		
INITIAL							YES	NO
-	158.	87-3257	04/18/90	Korea			· ·	,— -
-	159.	310805	09/3/01	Norway				1
	160.	2154462	06/26/95	Russian				
	161.	WO 86/01712	03/27/86	PCT				
	162.	WO 86/03416	06/19/86	PCT				
	163.	WO 93/11828	06/24/93	PCT				
	164.	WO 97/21463	06/19/97	PCT			·	
	165.	WO 97/21464	06/19/97	PCT				
	166.	WO 98/26835	06/25/98	PCT			· · · · · · · · · · · · · · · · · · ·	
_	167.	WO 99/58186	11/18/99	PCT				

EXAMINER INITIAL	 OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)										
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DATE CONSIDERED

Knobbe Martens Olson & Bear LLP

Intellectual Property Law

2040 Main Street Fourteenth Floor Irvine, CA 92614 Tel 949-760-0404 Fax 949-760-9502 www.kmob.com

MAIL STOP PATENT APPLICATION
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

Attorney Docket No. :

ICUMM.127C1

Applicant(s)

Thomas F. Fangrow, Jr.

For

MEDICAL VALVE WITH POSITIVE FLOW

CHARACTERISTICS

Attorney

Paul N. Conover

"Express Mail"

Mailing Label No.

EV 319020742 US

Date of Deposit

August 7, 2003

I hereby certify that the accompanying

Transmittal letter; specification in 18 pages; 19 sheets of drawings; **SIGNED COPY** of Declaration by Inventor in 1 pages; Information Disclosure Statement, PTO Form 1449 with 167 references; Check for Filing Fee in the amount of \$750; Return Prepaid Postcard

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Nelson Merida

EXPRESSP

PNC-3952.DOC:sls 080603